

WORMS AND WORM GEARS

STEEL-HARDENED, GROUND AND POLISHED WORMS BRONZE WORM GEARS

APPROXIMATE HORSEPOWER AND TORQUE* RATINGS
FOR CLASS I SERVICE (Service Factor = 1.0)

Ratio	Worm RPM	1800		600		100		Worm Cat. No.	Gear Cat. No.	DP
		Center Distance	Input HP	Output Torque	Input HP	Output Torque	Input HP			
40	2.167	.48	490	.26	672	.06	782	H1056	GB1052A	12
	2.625	.72	742	.43	1134	.11	1361	H1066	GB1062A	10
	3.250	1.12	1190	.71	1974	.18	2420	H1076	GB1072A	8
	4.333	2.11	2310	1.39	4034	.38	5345	H1086	GB1078	6
48	3.750	1.26	1614	.79	2622	.20	3267	H1076	GB1073	8
	5.000	2.37	3110	1.56	5445	.43	7260	H1086	GB1083	6
	10.000†	4.06	5320	1.68	6608	.72	17088	H1116	G1114†	3
50	2.583	.55	700	.30	998	.07	1134	H1056	GB1053A	12
	3.125	.83	1068	.51	1733	.12	1954	H1066	GB1063	10
	3.875	1.30	1716	.82	2836	.21	3498	H1076	GB850	8
	5.167	2.43	3327	1.60	5777	.44	7563	H1086	GB1079	6
54	11.000†	4.34	5985	1.79	7434	.77	19224	H1116	G1115†	3
60	3.000	.60	924	.33	1323	.08	1664	H1056	GB1260A	12
	3.625	.91	1408	.54	2142	.13	2571	H1066	GB1064	10
	4.500	1.42	2269	.89	3718	.23	4538	H1076	GB860	8
	6.000	2.66	4370	1.75	7625	.49	10210	H1086	GB1087	6
72	7.000	2.79	5521	1.84	9605	.51	12705	H1086	GB1084	6
80	3.833	.64	1288	.35	1849	.08	2118	H1056	GB1054	12
	4.625	.96	1961	.57	3042	.14	3630	H1066	GB1067	10
	5.750	1.49	3165	.94	5210	.24	6555	H1076	GB1074A	8
100	4.667	.60	1505	.33	2206	.08	2458	H1056	GB1055	12
	5.625	.90	2310	.54	3571	.13	4223	H1066	GB1065	10
	7.000	1.40	3711	.88	6092	.22	7563	H1076	GB8100	8

*Torque in Lb. Ins.

†Cast Iron Gear Rating with Hardened Worm shown.

All Worm and Worm Gear Ratings are based on a Hardened Steel Worm used with a Bronze Worm Gear.

1. For a Hardened Steel Worm used with a Cast Iron Gear, multiply the listed Rating by .50.
2. For an Unhardened Steel Worm used with a Cast Iron Gear, multiply the listed Rating by .25.
3. For an Unhardened Steel Worm used with a Bronze Gear, multiply the listed Rating by .35.

CENTER DISTANCES AND RATIOS AVAILABLE WITH STOCK WORM GEARING

Center Distance (inches)	Pitch	No. of Teeth in Gear	Worm Thread			Center Distance (inches)	Pitch	No. of Teeth in Gear	Worm Thread			Center Distance (inches)	Pitch	No. of Teeth in Gear	Worm Thread		
			Single	Double	Quad				Single	Double	Quad				Single	Double	Quad
			Ratio						Ratio						Ratio		
.375	48	20	20	10	5	1.781	32	100	100	50	25	4.333	6	40	40	20	10
.479	48	30	30	15	7.5	1.875	16	50	50	25	12.5	4.500	8	60	60	30	15
.531	32	20	20	10	5	1.917	24	80	80	40	20	4.500	4	24	24	-	-
.583	48	40	40	20	10	2.000	8	20	20	10	5	4.625	10	80	80	40	20
.666	24	20	20	10	5	2.125	10	30	30	15	7.5	4.667	12	100	100	-	-
.688	48	50	50	25	12.5	2.167	12	40	40	20	10	5.000	6	48	48	-	-
.688	32	30	30	15	7.5	2.188	16	60	60	30	15	5.000	3	18	18	-	-
.792	48	60	60	30	15	2.250	24	96	96	48	24	5.167	6	50	50	25	12.5
.844	32	40	40	20	10	2.333	24	100	100	50	25	5.500	4	32	32	-	-
.875	24	30	30	15	7.5	2.583	12	50	50	25	12.5	5.625	10	100	100	50	-
.938	16	20	20	10	5	2.625	10	40	40	20	10	5.750	8	80	80	-	-
1.000	48	80	80	40	20	2.625	8	30	30	15	7.5	6.000	6	60	60	30	15
1.000	32	50	50	25	12.5	2.667	6	20	20	10	5	6.000	3	24	24	-	-
1.083	24	40	40	20	10	2.812	16	80	80	-	20	6.500	4	40	40	-	-
1.156	32	60	60	30	15	3.000	12	60	60	30	15	6.750	8	96	96	-	-
1.208	48	100	100	50	25	3.000	6	24	24	12	6	7.000	8	100	100	-	-
1.250	16	30	30	15	7.5	3.125	10	50	50	25	12.5	7.000	6	72	72	36	18
1.292	24	50	50	25	12.5	3.250	8	40	40	20	10	7.000	3	30	30	-	-
1.333	12	20	20	10	5	3.438	16	100	100	-	-	7.500	4	48	48	-	-
1.469	32	80	80	40	20	3.500	6	30	30	15	7.5	7.667	6	80	80	-	-
1.500	24	60	60	30	15	3.625	10	60	60	30	15	8.000	3	36	36	-	-
1.562	16	40	40	20	10	3.750	8	48	48	-	-	9.000	6	96	96	-	-
1.625	10	20	20	10	5	3.833	12	80	80	40	-	9.333	6	100	100	-	-
1.719	32	96	96	48	24	3.875	8	50	50	25	12.5	9.500	4	64	64	-	-
1.750	24	72	72	36	18	4.000	6	36	36	-	-	10.000	3	48	48	-	-
1.750	12	30	30	15	7.5	4.000	4	20	20	-	-	11.000	3	54	54	-	-

Example: Given a center distance of 2.625", Table lists Worm and Worm Gear Ratios available:

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|--------------------------------------|-------------------------------------|
| 10 Pitch, 40 tooth, single = 40 to 1 | 8 Pitch, 30 tooth, single = 30 to 1 |
| 10 Pitch, 40 tooth, double = 20 to 1 | 8 Pitch, 30 tooth, double = 15 to 1 |
| 10 Pitch, 40 tooth, quad = 10 to 1 | 8 Pitch, 30 tooth, quad = 7.5 to 1 |